



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D5616-1
Job Sheet 203337

Accounting Job RD19-1069-01



Part No: D5616-1

Job Qty: 6 pcs

Part Name: Clamp



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 11/15/19

Job Tracking No:

Due Date: 11/29/19

Created By: Marie Lajeunesse

Type: R+D

Description:

Note: D5616-1 REV.A IPP REV.A NEW ISSUE 18/11/01 JFS VERIFIED BY:DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier	Sign-off
					Setup Hrs	Run Hrs		
100	Purchasing	6 pcs	11/29/19	11/29/19	0.00	0.00	Purchasing - 1	
							Purchasing - 2	
							Purchasing - 3	
110	Packaging 2-1 - Receive - B4B	6 pcs	11/29/19	11/29/19	0.00	0.00	Packaging 2 - 1 - B4B	
							Packaging 2 - 2 - B4B	
							Packaging 2 - 3 - B4B	
							Packaging 2 - 5 - B4B	
							Packaging 2 - 4 - B4B	
							Packaging 2 - 6 - B4B	
							Packaging 2 - 7 - B4B	
							Packaging 2 - 8 - B4B	
							Packaging 2 - 9 - B4B	
							Packaging 2 - 10 - B4B	
							Packaging 2 - 11 - B4B	
							Packaging 2 - 12 - B4B	
							Packaging 2 - 13 - B4B	
							Packaging 2 - 14 - B4B	
							Packaging 2 - 15 - B4B	
							Packaging 2 - 16 - B4B	
							Packaging 2 - 17 - B4B	
							Packaging 2 - 18 - B4B	
							Packaging 2 - 19 - B4B	
							Packaging 2 - 20 - B4B	
							Packaging 2 - 21 - B4B	
							Packaging 2 - 22 - B4B	
							Packaging 2 - 23 - B4B	
							Packaging 2 - 24 - B4B	
							Packaging 2 - 25 - B4B	
							Packaging 2 - 26 - B4B	
							Packaging 2 - 27 - B4B	
							Packaging 2 - 28 - B4B	



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL: 1 613 632-5200
Email: sales@dartaero.com
www.dartaero.com

Container No: S232832



Part: D5616-1

Job No: 203337

Serial No/Batch: S232832

Revision: A

Inspector:

Exp Date:

Instructions: Various STC's

Date: 11/18/19

11/15/2019

[Dart Hawkesbury] Job Sheet - Lajeunesse, Marie

					Packaging 2 - 29 - B4B	
					Packaging 2 - 30 - B4B	
					Packaging 2 - 31 - B4B	
					Packaging 2 - 32 - B4B	
					Packaging 2 - 33 - B4B	
					Packaging 2 - 34 - B4B	
					Packaging 2 - 35 - B4B	
					Packaging 2 - 36 - B4B	
120 QC 6	6 pcs	11/29/19	0.00 0.00		QC 6 - 9	DAS
					QC 6 - 68	NOV 28 2019 68
					QC 6 - 61	9-89
					QC 6 - 40	
					QC 6 - 81	
130 Packaging 3-1 - Stock - B4B	6 pcs	11/29/19	0.00 0.00		Packaging 3 - 1 - B4B	
					Packaging 3 - 2 - B4B	
					Packaging 3 - 3 - B4B	
					Packaging 3 - 4 - B4B	
					Packaging 3 - 5 - B4B	
140 QC 21 - SA	6 pcs	11/29/19	0.00 0.00		QC 21 - SA - 21	DAS NOV 28 2019
					QC 21 - SA - 70	21
					QC 21 - SA - 53	9-89

Part Op 100 - Issue P/O: _____ McMaster Carr Material release note required
 Descriptions: 110 - Receive & Inspect for Damage & Mat'l Certs
 120 - QC6- All purchased or subcontracted products
 130 - Identify as per dwg & Stock Location: *10001*
 140 - QC21- Final Inspection - Work Order Release

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
5462K64	Clamp	6 Ea (1 ea)	100-Purchasing	5237828

Job Allocations

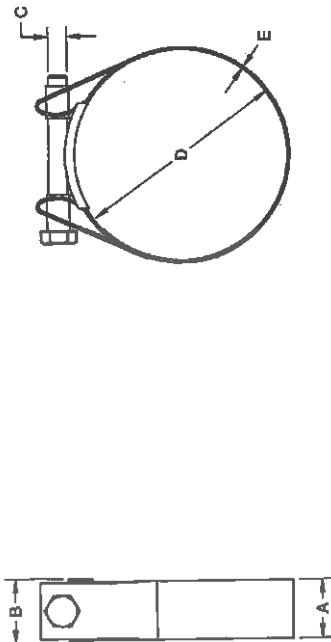
Operation	Component Part	Required	Inventory	Allocated
100-Purchasing	5462K64	6	5	0

Part Specifications

Specifications could not be found.

Plex 11/15/19 10:16 AM Dart.lajeunesse.marie

SPECIFICATION CONTROL DRAWING



D5616-X CLAMP

DART PIN	A	B	C	D	E	DESCRIPTION	WEIGHT	MANUFACTURER	MANUFACTURER P/N	VENDOR	VENDOR P/N
D5616-1	0.98 (25 mm)	1.08 (27.5 mm)	M8X1.25	3.583 (91 mm) 3.619 (97 mm)	0.039 (1 mm)	SUPRA HEAVY DUTY HOSE CLAMP STAINLESS STEEL, W4 91-97	0.28 lbs	MIKALOR	03013227	MAIN INDUSTRIAL SALES	18-0849197
D5616-3	0.98 (25 mm)	1.08 (27.5 mm)	M8X1.25	3.110 (79 mm) 3.346 (85 mm)	0.039 (1 mm)	SUPRA HEAVY DUTY HOSE CLAMP STAINLESS STEEL, W4 79-96	0.27 lbs	MIKALOR	03013200	MAIN INDUSTRIAL SALES	18-0847985
										MCMASTER CARR	5462K62



- NOTES:
- 1) MATERIAL: 304 STAINLESS STEEL
 - 2) FINISH: N/A
 - 3) TOLERANCES: PER MANUFACTURER'S SPECIFICATION
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: N/A
 - 6) IDENTIFICATION: IDENTIFY PER Q81 044 8.7
 - 7) WEIGHT: SEE TABLE

RELEASED
2019-11-06
EXN 14-431

APPROVED

B	ADDED NEW ITEM D5616-3, ADDED DIMENSION E AND ALL DIMENSIONS IN MM FOR REFERENCE	MW	18.07.03
A	NEW ISSUE	ZF	18.03.06
REV.	DESCRIPTION	BY	DATE
DESIGN	SAD		
DRAWN	MW		
CHECKED	ZF		
MFG. APPR.	SH		
APPROVED	NO		
DE APPR.	CP		
DATE	18.07.03		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. **D5616**
SHEET 1 OF 1

REV. B
SCALE
NTS

CLAMP

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WORK ORDER

NO. 2013337 MW

19/11/15



Entered: _____ Date: _____

WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

Route update only

NCR No. _____

Job: _____

Part No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐

DEPARTMENT/PROCESS

Skid-tube ☐
Machining ☐
Large Fab ☐
Cross tube ☐
Small Fab ☐
Finishing ☐
Eng. (Non-AW) ☐
Prod. Eng. Coord. ☐
Rec/Store/Packaging ☐

Engineering ☐
Water Jet ☐
Supplier ☐
Quality ☐

Date: _____

Sequence #: _____

QTY Affected: _____

MRB (QS1042)

Description Work Order Deviation

Disposition

Completed By

Lead hand / Supervisor

QC / QA Coordinator

Root Cause

Operator ☐
Manufacturing Process ☐
Equip/Tooling ☐
Handling/Preservation ☐
Material ☐
Product Improvement ☐
Process Improvement ☐
Human Factors ☐

FAULT CATEGORY

Pressure/Forced ☐
Bending ☐
Crushing ☐
Cracks ☐
Crimp/Kink/Ripple/Wave/Twist ☐
Marks/Chatter ☐
Mislabeled ☐
Contamination ☐
Misaligned/off center ☐
BOM/Route ☐
Broken/Damage/Defect ☐
Incomplete/Unclear Instructions ☐
Drill Holes ☐
Fit/Function ☐

Power Loss/Surge ☐
Folio/Program ☐
Grain Direction ☐
Weld ☐
Wrong Stock Pulled ☐
Out of Sequence ☐
Off-set/Set-up ☐
Positioned Wrong ☐
Outside Tolerance ☐
Drawing ☐
Finish ☐
Part Lost/Missing ☐
Misread ☐

Other/Details: _____



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER POHB045116



Supplier: MCM001-VU
McMaster-Carr Supply Co,
P.O. Box 7690
Chicago, IL 60680-7690 USA
Phone: 330 995 5500
Fax: 330 995 9600

Attention: N/A

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: POHB045116

PO Date: 11/15/19

Due Date: 11/20/19

Purchase Order

Revision:

Revision Date:

Ship-To Contact:

Lavoie, Chantal
Phone: 613-623-5200 Ext: 242
Fax: 613-632-1053
clavoie@dartaero.com

NOV 18 2019

Via: Ground

Pymt Terms: Net 60

Freight Terms:

Special Comments:

Items

Line Item	Job	Part	Drawing	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
1		2044T48		4 ft per pcs	Tube Ø1.36 receive ft	Firmed	-	11/20/19	8 ft	0 ft	8 ft	\$0.84/R	\$6.72
Line Item Note: 2 pcs of 48"													
2		2044T68		25/pk	Cap Ø1.36 receive ea	Firmed	-	11/20/19	25 Ea	0 Ea	25 Ea	\$0.348/Ea	\$8.70
3		5232T243		1/pack	Standard Tee 1/4 NPT Tee Connector, 1/4 NPT Female 1/pack	Firmed	-	11/20/19	10 Ea	0 Ea	10 Ea	\$30.89/Ea	\$308.90
4		5232T313		1/pack	COUPLING 1/4 NPT TO 1/8 NPT Straight Reducer, 1/4 x 1/8 NPT Female	Firmed	-	11/20/19	10 Ea	0 Ea	10 Ea	\$6.67/Ea	\$66.70
5		5232T316		1/pack	Hex Nipple 1/4 NPT TO 1/4 NPT Precision Extreme-Pressure Steel Pipe Fitting 1/pack	Firmed	-	11/20/19	10 Ea	0 Ea	10 Ea	\$6.44/Ea	\$64.40
6		6852K11		1/pk	Squeeze Grip Valve Snap-Shut Threaded On/Off Valve 1/pack	Firmed	-	11/20/19	10 Ea	0 Ea	10 Ea	\$13.10/Ea	\$131.00



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PURCHASE ORDER

POHB045116



Items													
Line Item	Job	Part	Drawing	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
7		8063K37		1/pack	BRASS VALVE 1/4 NPT MALE x SCHRDER AIR VALVE Air Fill Valve with 1/4 NPT Inlet 1/pack	Firmed	-	11/20/19	10 Ea	0 Ea	10 Ea	\$6.65/Ea	\$66.50
8		8NR-47		91259A729 1/pk	Shoulder Bolt 1/2" x 4 1/2"	Firmed	-	11/20/19	9 Ea	0 Ea	9 Ea	\$4.82/Ea	\$43.38
9		98023A031		50/pk	Yellow Zinc Plated Grade 8 Steel Washer 0.406" ID. X 0.812" OD. X 0.051"-0.080" THK.	Firmed	-	11/20/19	50 Ea	0 Ea	50 Ea	\$0.1288/Ea	\$6.44
10		MC1095S.032		9036K507	C1095 Blue Tempered Spring Steel Sheet .032 : MCMASTER P/N: 9036K507 X 2 PK MC1095S.032 BLUE FINISHED AND POLISHED 1095 SPRING STEEL .032 6" X 10' COIL receive sf	Firmed	-	11/20/19	10 sf	0 sf	10 sf	\$14.05/sf	\$140.50
NOV 18 2019													
Grand Total: \$929.20													



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PURCHASE ORDER

POHB045116



Order Notes

Procurement Quality Clauses

A005 RIGHT OF ENTRY
A016 PERSONNEL QUALIFICATION
A026 CERTIFICATION OF MATERIAL CONFORMANCE
A032 DOCUMENT SPECIAL REQUIREMENTS
A033 STATEMENT OF CONFORMITY/TEST RECORDS FOR NAS, AN and MS FASTENERS
A040 NOTIFICATION OF QUALITY ESCAPE
A041 QUALITY MANAGEMENT SYSTEM
A042 DART NOTIFICATION BY SUPPLIER
A043 RETENTION OF QUALITY DOCUMENTS

A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM

A049 SUPPLIER AWARENESS

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 11/18/19 8:32 AM Dart.Lavoie.Chantal

200 Aurora Industrial Pkwy
Aurora OH 44202-8087
330-995-5500
cle.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada
Attention: N/A

Purchase Order
POHB045116

Order Placed By
Chantal Lavoie

McMaster-Carr Number
5238393-02

Page 1 of 1

11/15/2019

Line	Product	Ordered	Shipped
2	2044T68 End Caps for 1.36" ID Round Cut-to-Length Shipping Tube, Packs of 25	1 Pack	1
3	5232T243 Precision Extreme-Pressure Steel Pipe Fitting, Tee Connector, 1/4 NPT Female	10 Each	10
4	5232T313 Precision Extreme-Pressure Steel Pipe Fitting, Straight Reducer, 1/4 x 1/8 NPT Female	10 Each	6
5	5232T316 Precision Extreme-Pressure Steel Pipe Fitting, Straight Connector, 1/4 NPT Male	10 Each	10
6	6852K11 Snap-Shut Threaded On/Off Valve for Water and Inert Gas, 1/4 NPT Female	10 Each	10
7	8063K37 Air Fill Valve with 1/4 NPT Inlet	10 Each	10
8	91259A729 Alloy Steel Shoulder Screw, 1/2" Shoulder Diameter, 4-1/4" Shoulder Length, 3/8"-16 Thread	9 Each	9
9	98923A031 Zinc Yellow-Chromate Plated Grade 8 Steel Washer for 3/8" Screw Size, 0.406" ID, 0.812" OD, Packs of 50	1 Pack	1
10	9036K507 Wear-Resistant 1095 Spring Steel, 0.0320" Thick, 6" Wide, 10 Feet Long	2 Each	2
11	5462K64 Tight-Seal Easy-Install Bolt Clamp for Soft Hose and Tube, 304 Stainless Steel, 3-9/16" to 3-13/16" ID	6 Each	6
12	93625A300 18-8 Stainless Steel Nylon-Insert Locknut, M8 x 1.25 mm Thread, Packs of 50	1 Pack	1

RECEIVED

NOV 18 2019

Shipped separately from our Chicago warehouse on 11/15

DART AEROSPACE LTD.

4	5232T313 Precision Extreme-Pressure Steel Pipe Fitting, Straight Reducer, 1/4 x 1/8 NPT Female	10 Each	4
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Certificate of compliance

This is to certify that the above items were supplied in accordance with the description and as illustrated in the catalog. Your order is subject only to our terms and conditions, available at www.mcmaster.com or from our Sales Department.

Sarah Weinberg
Compliance Manager